

LUC-308/Lin 1

2

CLAIM AMENDMENTS

1. (currently amended) A method comprising the steps of:
directing a call intended for a mobile to a virtual tandem switch;
querying, by the virtual tandem switch, a home location register to obtain call information for the mobile;
converting control messages at a first location, between a packet-based protocol and a non-packet-based protocol;
converting voice messages at a first location, between a packet-based protocol and a non-packet-based protocol;
converting control messages at a second location, between a packet-based protocol and a non-packet-based protocol;
converting voice messages at a second location, between a packet-based protocol and a non-packet-based protocol; and
setting up the call to the mobile over a packet-based transport network.

2. (Canceled)

3. (currently amended) The method of claim 2_1, wherein the step of converting non-packet-based protocol voice messages at a first location comprises converting a time division multiplexed protocol.

4. (currently amended) The method of claim 1, wherein the call is directed to the mobile while the mobile is roaming form away from its home service area.

LUC-308/Lin 1

3

5. (Original) A switch comprising:

a first converter arranged and constructed to convert control messages between a packet-based protocol and a first protocol, wherein the first converter is located at a first geographic location;

a second converter arranged and constructed to convert voice messages between a packet-based protocol and a first protocol, wherein the second converter is located at the first geographic location;

a third converter arranged and constructed to convert control messages between a packet-based protocol and a second protocol, wherein the third converter is located at a second geographic location;

a fourth converter arranged and constructed to convert voice messages between a packet-based protocol and a second protocol, wherein the fourth converter is located at the second geographic location;

such that the switch provides a gateway between the public switched telephone network and a wireless network.

6. (Original) The switch of claim 5, wherein the first protocol is an ISDN User Part signalling protocol and the second protocol is a time division multiplexed protocol.

7. (Original) The switch of claim 5, further comprising a network feature server, arranged and constructed to provide network routing between the converters.

LUC-308/Lin 1

4

8. (Original) The switch of claim 5, further comprising a switch management system, arranged and constructed to provide operation, administration, and provisioning of the converters of the switch.

9. (New) The method of claim 1, wherein the step of converting the non-packet-based protocol voice messages at a second location comprises converting a time division multiplexed protocol.

10. (New) the method of claim 1, further comprising the step of routing at least one of the control messages and voice messages between the first and the second locations with a network feature server.

11. (New) A method of providing a gateway between a public switched telephone network and a wireless network comprising the steps of:

converting control messages at a first location, between a packet-based protocol and a non-packet-based protocol;

converting voice messages at a first location, between a packet-based protocol and a non-packet-based protocol;

converting control messages at a second location, between a packet-based protocol and a non-packet-based protocol; and

converting voice messages at a second location, between a packet-based protocol and a non-packet-based protocol;

LUC-308/Lin 1

5

12. (New) The method of claim 11, wherein the step of converting the non-packet-based protocol voice messages at a first location comprises converting a time division multiplexed protocol.

13. (New) The method of claim 11, wherein the step of converting the non-packet-based protocol voice messages at a second location comprises converting a time division multiplexed protocol.

14. (New) the method of claim 11, further comprising the step of routing at least one of the control messages and voice messages between the first and the second locations with a network feature server.